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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,727	11/14/2005	Yoshimasa Ohashi	280932US90PCT	3299
22850 7590 08/29/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER KERNS, KEVIN P	
			ART UNIT 1725	PAPER NUMBER
			NOTIFICATION DATE 08/29/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

Application No.

10/556,727

Applicant(s)

OHASHI ET AL.

Examiner

Kevin P. Kerns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-23 is/are rejected.
- 7) ☒ Claim(s) 7, 20 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claims 7, 20, and 22 are objected to because of the following informalities: in claim 7, last line, replace "a" with "an" before "upper". In claims 20 and 22, last line of both claims, replace "the" with "a" before "maximum" to obtain proper antecedent basis. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 and 12-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 1, 3-8, and 19-23, it is unclear what is meant by the term "solid" in the amended claims, as the applicants' limitations "a solid aluminum billet" (claims 1, 3-8, and 19) and "a solid aluminum raw pipe" (new independent claims 20 and 22) are in conflict with each other when taken in view of the applicants' remarks/arguments of this amendment. In other words, a "solid" aluminum raw pipe would have to be "hollow", and a "solid" aluminum billet would have to be solid (i.e. solid continuous rod etc.) according to the applicants' remarks, thus rendering the claims indefinite.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-8 and 12-23 insofar as definite (in view of the 35 USC 112, 2<sup>nd</sup> paragraph rejections) are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al. (US 4,875,519) in view of the applicants' admitted prior art (AAPA; page 2, line 2 through page 3, line 4 of applicants' Background Art of the specification).

Ishii et al. disclose a method of manufacturing aluminum pipe, in which the method comprises the following features: as to claims 1 and 2, Ishii et al. disclose a method of manufacturing aluminum pipe with solidified shell less than 13mm (figure 1). As to claims 4 and 5, the casting rate is 70 mm/min (col. 6, line 29). Ishii et al. disclose

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the claimed invention, but lack the mentioning of casting the aluminum billet while keeping a distance from a lowermost portion of a mold to an upper surface portion of a molten aluminum to be 40 mm or less. However, it would have been obvious to have a mold of 40mm or less, since in continuous casting, the mold need not be too long as molten metal solidifies and carry downward to another treatment chamber. The mold is only used for cooling and solidification purposes. Therefore, it would have been obvious to have a short mold, in order to reduce friction between a solidified billet and the mold as the billet is being drawn downward. Ishii et al. do not disclose that the aluminum pipe is "solid" (insofar as definite in view of the applicants' interpretation of the term "solid").

However, the applicants' admitted prior art (AAPA; page 2, line 2 through page 3, line 4 of applicants' Background Art of the specification) discloses a method of manufacturing aluminum extruded members by extruding a billet manufactured by a float casting method, in which the extruded billet would be "solid" and for use in manufacture of a photosensitive drum, such that the method disclosed in the AAPA is advantageous for making a photosensitive drum have a smooth surface that is low in surface roughness, thus improving the required printing quality (AAPA; page 2, line 2 through page 3, line 4 of applicants' Background Art of the specification).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the method of manufacturing aluminum pipe, as disclosed by Ishii et al., by using the method of manufacturing aluminum extruded members by extruding a billet manufactured by a float casting method, in which the

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extruded billet would be "solid" and for use in manufacture of a photosensitive drum, as taught in the applicants' admitted prior art (AAPA), in order to make a photosensitive drum having a smooth surface that is low in surface roughness, thus improving the required printing quality (AAPA; page 2, lines 17-25 of applicants' Background Art of the specification).

### ***Response to Arguments***

7. The examiner acknowledges the applicants' amendment received by the USPTO on July 2, 2007. The amendments overcome prior objections to claims 10-17, but new claim objections have been raised by the applicants' amendments to claims 7, 20, and 22 (see above section 1). In addition, new 35 USC 112, 2<sup>nd</sup> paragraph rejections have been raised by the amendments (see above section 3). The applicants have cancelled claims 9-11, and have added new claims 18-23. Claims 1-8 and 12-23 are currently under consideration in the application.

8. Applicants' arguments with respect to claims 1-8 and 12-23 have been considered but are moot in view of the new ground(s) of rejection.

With regard to the applicants' remarks/arguments on pages 6 and 7, in particular the 1<sup>st</sup> full paragraph on page 7, it is noted that the applicants' indefinite limitation "solid" has prompted the new grounds of rejection, and has been interpreted by the examiner as not being "hollow", as the pipe disclosed by Ishii et al. would be interpreted. The applicants are referred to the above 35 USC 112, 2<sup>nd</sup> paragraph rejections, as their

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remarks/arguments are in conflict with their definition and use of the term "solid" provided throughout the amended claims.

### ***Conclusion***

9. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan Johnson can be reached on (571) 272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns *Kevin Kerns 8/25/07*  
Primary Examiner  
Art Unit 1725

*KPK*

kpk

August 25, 2007